

The attached sheets from Francis D. Klingender *ART AND THE INDUSTRIAL REVOLUTION* (1968) are meant to speak to two specific chords within your psyche: your (and indeed 'my' also) lust for recording the data of local history (p. 25), and, your need to know where to find the 'history' of the railroad in England (pp. 106-107).

ART

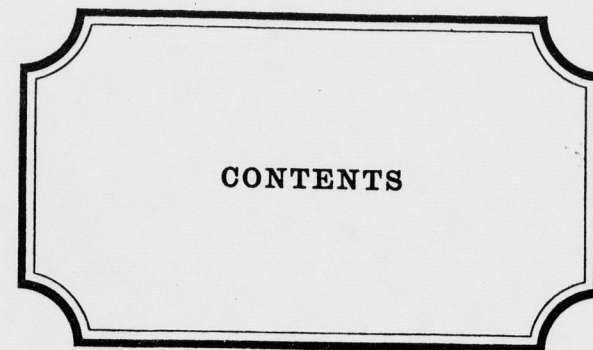
AND THE INDUSTRIAL REVOLUTION

by Francis D. Klingender

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EVELYN, ADAMS & MACKAY

I will use the railroad information on the next page in the Calendar that I produce for 1986 -- RGT has already given me some data for the Calendar. JWB was supposed to also. There is no way that a ¹⁹⁸⁵ calendar can be properly produced and effectively marketed in the remaining few weeks of the year.



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and agile. Its birth was marked by the patent which a great engineering genius, Richard Trevithick (1771-1835), took out in 1802 for the 'Construction of Steam-engines; application thereof for driving carriages, and for other purposes'. Trevithick's engine was to transform the whole world. It used high-pressure steam; it was light and portable; it did away with the beam and harnessed the piston directly to its crank by a connecting rod; it could drive light machinery, above all, it could be mounted, with its boiler, on wheels and made to propel itself.

On Monday, 13 February 1804, Trevithick put in motion the first railway locomotive in history on a plateau running from the Penryn Ironworks near Merthyr Tydfil to the Glamorgan Canal, some ten miles down the valley. Anthony Hill, proprietor of the Plymouth Foundry, bet Samuel Haefrey, the Penryn ironmaster, five hundred guineas that the locomotive could not haul ten tons of iron the whole way. The train set out on February 21. The locomotive ground its way along the line at five miles an hour, hauling not only ten tons of iron but seventy people hanging on to the trucks as well. Hill lost his bet. The locomotive was a great mechanical success, but it was too heavy for the plateau and broke the cast-iron plates. It was soon withdrawn and used to work a hammer, though the railway itself remained in use for many years. It was superseded by the Taff Vale Railway, which followed the same route and was opened in 1841 (Fig. 47).

In 1805 a second locomotive was built to Trevithick's design at Gateshead, and it has been suggested that this may have stimulated George Stephenson (1781-1848) to start making his first locomotive for the Killingworth colliery which started work in 1814. In July 1808 Trevithick exhibited yet another locomotive, 'Catch me who can', on a circular course near Euston Square and wagered it to run twenty-four hours against any horse in the kingdom. The result is not known, but the engine ran for a few weeks till it broke a rail and overturned. This was his last attempt at steam locomotion. His ideas, like those of Savery before him, were in advance of the technical resources of his time, and he did not have the patience to carry his great invention to the point of profitable exploitation. Other men reaped the benefits that were properly his.

Within a month of the Euston demonstration Trevithick started work on what was an almost impossible task, given the resources of his time—boring a tunnel under the Thames. Nevertheless, he succeeded in driving over 1,000 feet of heading out of a total of 1,200 before the work was stopped by an inundation. The directors of the enterprise refused to support Trevithick's plans to dam the water back and make the heading dry, and it was abandoned. Seventeen years later, in 1824, Mark

The poets' interest in trade and engineering was only one of many symptoms of a shift that was taking place in the intellectual life of Britain. The most progressive currents of thought were no longer emerging in the metropolis, but in out-of-the-way provincial areas, where mining, industry and farming¹⁸ were being remodelled on scientific lines. Even the Royal Society, once the organizing centre of applied research, lost some of the initiative in this field during the eighteenth century.

A symptom of the intellectual awakening of the provinces is the topographical literature of the period. First becoming important in the seventeenth century, it grew ever more voluminous as the eighteenth century advanced, and culminated in the decades around 1800. It expressed a new attitude to nature and to history. With ever-increasing zeal, scientific men and local worthies drawn from all classes explored the mineral wealth, the soils, the plant and animal life of each locality. They described the dress and customs of the people, their methods of husbandry and their trade. Local dialects and folk-songs were recorded. And, with intense pride in the latest achievements of art and industry, there emerged a no less fervent enthusiasm for local history and archaeology.¹⁹ Nor was this new attitude purely intellectual: it gradually produced a new romantic response to the beauties and charms of nature.

How intimately this change in outlook was linked up with the practical changes that were taking place at the time in agriculture and industry, and how rapidly it occurred, is illustrated by a passage from the preface to John Dalton's *Descriptive Poem*:

When we behold rich improvements of a wild and uncultivated soil, in their state of maturity, without having observed their rise and progress, we are struck with wonder and astonishment, to see the face of Nature totally changed. It carries an air of enchantment and romance: and the fabulous and luxuriant description, given us by the Poet, of yellow harvests rising up instantaneously under the wheels of the chariot of Ceres, as it passed over the barren, blasted, and desolate land, is no longer so extravagant an image as it once was. The fertility and bounding abundance of such a scene, is not so much the result of the power of the imagination, as of the actual state of the land.

But how great and rational sever the pleasure of such a sight may be, it is still surpassed by that arising from the extraordinary increase of a trading Town, and new plantations of Houses and Men. Such was the satisfaction the author felt at the appearance of the *Descriptive Poem*, that he has been enabled to add many new facts and circumstances, that they are generally esteemed to be well worth the observation of travellers. . . .²⁰

A similar contrast emerges if Defoe's England of 1725 is compared with that